

AMENDMENTS TO THE SPECIFICATION:

Please amend the heading beginning at page 1, line 14, as follows:

Background of the invention

Please amend the paragraph beginning at page 1, line 37, as follows:

The knowledge of the location of a mobile entity opens up a new set of applications and ~~enhance~~enhances existing ones. A number of different applications in different fields, such as governmental, operators or commercial applications are and will be provided.

Please amend the heading beginning at page 4, line 8, as follows:

Summary of the present invention

Please amend the paragraphs beginning at page 4, lines 9 and 16, as follows:

It is an object of the present invention to mitigate the above described drawbacks of the prior art by providing a method for a location service requested from an originating network to obtain the position of a mobile station when located in a current network, wherein said originating network and current network ~~uses~~use different positioning mechanisms/protocols. In order to achieve said object the invention provides a method for obtaining the position of a mobile station in a communications system, wherein the ~~The~~ current network of the mobile station is identified, and a suitable positioning protocol is selected, based on the identified current network.

Please amend the paragraph beginning at page 4, line 22, as follows:

~~The invention also provides a system comprising means for working the method, which is characterised by a~~ A protocol controller is configured to apply positioning protocols for different communication networks for usage in communication with the networks. ~~A~~a processing component is configured to identify the mobile station's current network, and based on the identified current network, select among said positioning protocols a suitable positioning protocol for communication with the current network.

Please amend the heading beginning at page 5, line 9, as follows:

Detailed description of the invention

Please amend the paragraph beginning at page 5, line 10, as follows:

With reference now to the figures wherein like or similar elements are designated with identical reference numerals, there is a block diagram and a flowchart, depicting the invention. The purpose of this diagram is to illustrate the features of the invention and the basic principles of operation of embodiments thereof. This diagram is not necessarily intended to schematically represent particular modules of circuitry or any particular data or control paths. It should also be emphasised that the terms "comprises" and "comprising" when used in this specification is taken to specify the presence of stated features, integers, steps or components but does not preclude the presence or addition of one or more other features, integers, steps, components or groups thereof.

Please amend the paragraph beginning at page 5, line 25, as follows:

Figure 1 illustrates one example embodiment of a communication network configuration including a ~~first embodiment of the system according to the invention~~ for providing location services for positioning a subscriber with a portable radio communication apparatus or equipment such as a mobile telephone 1 when located in a current network 6, wherein a home network 5 and the current network 6 ~~uses~~use different positioning mechanisms/protocols.

Please amend the paragraph beginning at page 6, line 1, as follows:

The system configuration comprises a home Gateway Mobile Location Centre (H-GMLC) 2 and a Serving Mobile Location Centre (SMLC) 3. The GMLC is a vital part of a mobile positioning system. The GMLC is the Ericsson Gateway Mobile Positioning Centre (GMPC), which is Ericsson's implementation of, but is not limited to, the by ETSI standardised Gateway Mobile Location Centre (GMLC). In one embodiment of the invention, the GMLC 2 is a system that comprises at least a computer processor or other processing component and a data store operatively connected to the processing component.

Please amend the paragraph beginning at page 6, line 25, as follows:

The authorized request is delivered to the SMLC 3 via a PLMN 5, for example a GSM network. The SMLC 3 collects position information from the GSM network 5 and calculates the location, such as co-ordinates, to be used by the service or client 4. The location ~~are~~is delivered to the GMLC 2, which is adapted to receive the location and create a location response. This response is replied to the requesting LCS-C 4.

Please amend the paragraph beginning at page 6, line 33, as follows:

~~According to the invention, the~~ The GMLC 2 is adapted to provide support for LCS where position needs to be obtained for roaming terminals and/or terminals belonging to other PLMNs 6. The GMLC 2 has information to dynamically select a protocol, SS7 or IP-based in this example embodiment, to be used in the communication of positioning data with each specific PLMN 5,6. Thus, based on roaming capability information defined in the GMLC 2 for each HPLMN 5 and VPLMN 6, the GMLC 2 is adapted to select the proper protocol to be used when addressing the particular PLMN 5,6 with a positioning request or routing request.

Please amend the paragraph beginning at page 7, line 6, as follows:

The GMLC 2 is in this embodiment ~~of the invention~~ configured, but not limited, to select between different roaming protocols, for example SS7 based protocols, or IP based protocols such as the GMLC-centric IP roaming protocol or location middleware (LMw) centric IP roaming protocols. It should therefore be apparent to those skilled in the art that ~~the invention~~ this technology is not limited to be employed in an GMLC but could also be located in for example a location middleware. Also, in one embodiment LMw is used as an interconnect layer between LCS clients and GMLCs. In a such embodiment, network to network communication may be performed between LMw nodes.

Please amend the paragraph beginning at page 7, line 24, as follow:

A flow chart in FIG 2 illustrates one ~~embodiment of a~~ example method of positioning a subscriber ~~according to the invention~~. In step 101 the LCS client 4 sends a positioning request to the GMLC 2. The GMLC receives the request in step 102, analyses and identifies the

subscriber's home PLMN (HPLMN) 5 in an LCS signalling list in step 103. Said LCS signalling list comprises entries, each including a network identifier and a protocol. Based on the result from the identification and analysis in step 103, a suitable positioning protocol, for example SS7, is selected for communication with the home PLMN in step 104. A routing information request is sent to the home PLMN 5 in step 105 and an answer is received by the GMLC 2 from the PLMN 5 in step 106.

Please amend the paragraphs beginning at page 8, lines 1 and 13, as follows:

When the GMLC 2 has received the answer it analyses the parameter data and identifies the subscriber's current PLMN in the LCS signalling list in step 107. In this example the MS 1 is roaming in a visited PLMN 6. Based on the result from the identification and analysis in step 107, a suitable positioning protocol, for example an IP based protocol using the IP network 7, is selected for communication with the visited PLMN 6 in step 108. A position request is sent to the visited PLMN 6 in step 109 and an answer including co-ordinates and/or other location information about the roaming subscriber and its apparatus 1 is received by the GMLC 2 from the VPLMN 6 in step 110. Finally, the GMLC 2 creates a position response and replies it to the requesting LCS-C 4 in step 111.

Please amend the paragraph beginning at page 8, line 15, as follows:

The method, system and apparatus ~~according to the invention is however~~ are not limited to positioning of roaming MSs, but are capable of positioning MSs in all cases involving positioning related communication between PLMN~~s~~. One example of a traffic case where such communication is needed is when an LCS client 4"using an originating GMLC(O-GMLC) 2" and

needs to locate an MS which is a subscriber to another PLMN than an OPLMN (Originating PLMN) 8, independently on whether the MS is roaming outside its home PLMN or not. Another such traffic case occurs when an MS 1 is currently located in its home network HPLMN 5 or a visited network VPLMN 6 but accesses a location based service, using another LCS-C (4") associated with an originating GMLC(O-GMLC)(2").

Please amend the paragraph beginning at page 9, line 1, as follows:

Although one example embodiment of the method, system and apparatus ~~of the invention~~ has been illustrated in the accompanying drawings and described in the foregoing detailed description, it will be understood that the invention is not limited to the embodiment disclosed, but is capable of numerous rearrangements, modifications and substitutions without departing from the spirit of the invention as set forth and defined by the following claims.